GROWTH, JOBS, AND POVERTY IN AFRICA

KEY MESSAGES

Africa’s growth momentum in the past 25 years has been remarkable by historical standards. Was it marked by growth dynamics that presage sustained growth? Were growth episodes accompanied by shifts in economic fundamentals? Has growth in Africa been job creating and inclusive? What are the common threads that connect rapid growth with continuous expansion in employment opportunities?

This chapter explores these issues and provides insights and evidence on the character of long-term growth and its link with jobs and poverty. Five key messages emerge from the analysis:

• In at least two-thirds of the African countries with data, per capita income rose for eight consecutive years at a rate of 3.5 percent or more between 1950 and 2016. This growth performance was underpinned by improvements in economic fundamentals in some of these countries.

• In some African countries, growth accelerations were attained largely through increases in total factor productivity rather than the accumulation of capital. This evidence runs counter to the middle-income trap view.

• Successful take-offs require increases in productivity as much as growth in investment. Labor force reallocations from the traditional to the modern sector are a key component of African growth accelerations. They require not only the creation of modern jobs but also policies that empower the poor.

• Growth accelerations led to significant declines in poverty and inequality. Countries that experienced three episodes of growth acceleration reduced poverty by 1.3 percentage points more a year and inequality by 0.2 percentage points more a year than countries that experienced no growth acceleration.

• Positive structural change occurred in a number of African countries, with labor moving from low- to high-productivity sectors. Employment growth did not keep pace with labor force growth, however, leaving a large part of the population, unemployed or underemployed, particularly the young.
GROWTH DYNAMICS: ACCELERATIONS, SPIKES, RECOVERIES AND FAILED TAKE-OFFS

Developing countries are prone to alternate phases of growth, stagnation, decline, and even catastrophic loss. The instability of growth highlights the need to analyze and better understand the determinants of shifts in growth rates by focusing on growth episodes and accelerations.

To understand the potential and prospects for sustaining growth, employment, and poverty reduction in Africa, this chapter identifies growth acceleration episodes using comparable data spanning the last seven decades. It finds that there have been many growth accelerations—and that long-run growth outcomes are closely related to them.

Some accelerations are spikes to higher GDPs per capita. Some are merely recoveries to previous highs. And some are failed take-offs preceding a crisis. A standard growth accounting exercise reveals the contributions of factor accumulation and total factor productivity to growth during spikes in growth episodes. The analysis also examines the contribution of structural change through the sectoral composition of economic activity, showing that sectoral labor reallocations have played an important role in African growth spikes.

Growth accelerations

In a conventional growth framework, fundamentals—such as the terms of trade, technology, economic institutions, and governance—determine an economy’s long-term prospects. When fundamentals change, long-term growth prospects evolve accordingly, leading to growth accelerations (or decelerations).

Hausmann, Pritchett, and Rodrik (2005) focus on terms of trade shocks, market economy reforms, and political economy factors as determinants of growth accelerations. They define a growth acceleration period as having at least 3.5 percent average annual growth of per capita GDP over a period of eight years and growth at least 2 percentage points higher than it was in the previous eight years. To rule out episodes of economic recovery, the level of real GDP should also be higher in the last year of the acceleration period than in years before the acceleration.

Using data from the Penn World Tables 9.0, this section identifies growth accelerations in 33 of the 50 African countries with data. The growth rate of countries with at least one acceleration was significantly higher than that of countries without any acceleration. Countries without accelerations had annual growth rates of less than 1 percent (figure 2.1).

Countries move to the right along the horizontal axis when the rate of growth of per capita GDP (measured along the vertical axis) is positive; they move to the left when it is negative (figure 2.2). Some countries (such as Botswana, Burkina Faso, and Egypt) experienced multiple peaks. Others (such as Ghana, Kenya, and Swaziland) experienced single peaks. Côte d’Ivoire, Nigeria, and Zimbabwe experienced deep troughs, which reduced GDP per capita following initial accelerations.

African economic growth cannot be understood without carefully studying crisis episodes, which have been frequent. A crisis is a prolonged period of negative growth. It ends when the growth rate returns to close to zero.

Growth spikes

Growth spikes are acceleration episodes that lead to higher GDP per capita—and are not merely recoveries after a crisis or are not leading into a crisis. Africa experienced 38 growth spikes over the study period, in 18 countries (table 2.1). The “middle-income trap” refers to the inability of upper-middle-income countries to catch up with developed countries. It can be generalized to all countries that are stuck at a relatively low income after having experienced at least one spike of growth. Escaping the middle-income trap requires several spikes of growth—the pattern observed in emerging countries since the 1950s, notably in East Asia.

Twelve African countries experienced multiple growth spikes (on average 2.7 spikes, with an average length of 12.3 years (table 2.2). These spikes increased GDP per capita by 158 percent on average, accounting for most of these countries’ growth over the observation period.

Six countries experienced single growth spikes. The total economic growth of GDP per
Growth spikes are acceleration episodes that lead to higher GDP per capita—and are not merely recoveries after a crisis or are not leading into a crisis.
Growth, Jobs, and Poverty in Africa

The GDP per capita achieved by these countries is lower than that of countries with multiple spikes, but it is still substantial (44 percent on average, for an average length of 10.5 years).

Failed take-offs
Growth acceleration episodes followed by crisis episodes are considered failed take-offs, as in Algeria, Cameroon, Congo, Côte d’Ivoire, Equatorial Guinea, Ethiopia, Gabon, Malawi, Nigeria, Sierra Leone, Zambia, and Zimbabwe (see table 2.1).

In a failed take-off, the crisis often has economic roots, possibly related to characteristics of the previous acceleration episode that make it unsustainable. During the early 1960s and 1970s, for example, Côte d’Ivoire and Nigeria financed rapid growth by excessive external borrowing or

![Figure 2.2: Growth dynamics in African countries that experienced growth accelerations](image)

Source: Data from Penn World Tables 9.0.
short-lived positive terms of trade shocks, which later created a debt crisis. In Zimbabwe political events derailed growth. In such cases the initial acceleration cannot be considered as having contributed to economic progress. On average the growth observed after a failed take-off sequence is slightly negative.

In half the countries (Cameroon, Congo, Côte d’Ivoire, Malawi, Zambia, and Zimbabwe), the failed take-off was not followed by an acceleration...
In Algeria, Equatorial Guinea, Ethiopia, Gabon, Nigeria, and Sierra Leone, the failed take-off was followed by a recovery. This second post-crisis acceleration episode may be considered a mere recovery in Nigeria and Sierra Leone, where GDP per capita was still below the level attained before the failed take-off. In contrast, Algeria, Equatorial Guinea, Ethiopia, and Gabon were better off after the end of the sequence of failed take-off and recovery. In such cases the second acceleration could possibly be considered a growth spike rather than a mere recovery. In Cameroon, Congo, and Zimbabwe early acceleration in the 1960s was followed by a failed take-off and a deep crisis beginning in the 1980s. In this sequence, the first acceleration episode could possibly be considered a growth spike.

Three countries (Angola, Mozambique, and Rwanda) experienced growth accelerations after crisis episodes. Although these recoveries suggest substantial growth potential, it is too early to consider their accelerations as growth spikes, because much of the observed growth corresponds merely to post-crisis recovery.

### Sources of growth accelerations

In a dual economy a modern high-productivity sector coexists with a traditional low-productivity sector. In such an economic structure, economic

---

**TABLE 2.2 Average annual growth of GDP per capita during growth spikes**

<table>
<thead>
<tr>
<th>Country</th>
<th>Average annual growth during acceleration (percent)</th>
<th>Average length of acceleration (years)</th>
<th>Number of accelerations</th>
<th>Total growth over accelerations (percent)</th>
<th>Contribution to historical growth (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Countries with multiple growth accelerations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botswana</td>
<td>7.5</td>
<td>13.7</td>
<td>3</td>
<td>309</td>
<td>85</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>3.0</td>
<td>10.0</td>
<td>2</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td>Cabo Verde</td>
<td>4.2</td>
<td>12.0</td>
<td>3</td>
<td>152</td>
<td>83</td>
</tr>
<tr>
<td>Egypt</td>
<td>5.0</td>
<td>14.0</td>
<td>4</td>
<td>283</td>
<td>101</td>
</tr>
<tr>
<td>Mali</td>
<td>3.5</td>
<td>17.0</td>
<td>2</td>
<td>118</td>
<td>125</td>
</tr>
<tr>
<td>Mauritania</td>
<td>5.2</td>
<td>12.5</td>
<td>2</td>
<td>129</td>
<td>119</td>
</tr>
<tr>
<td>Mauritius</td>
<td>4.6</td>
<td>12.3</td>
<td>3</td>
<td>169</td>
<td>126</td>
</tr>
<tr>
<td>Morocco</td>
<td>4.1</td>
<td>9.5</td>
<td>4</td>
<td>157</td>
<td>92</td>
</tr>
<tr>
<td>Seychelles</td>
<td>5.2</td>
<td>15.0</td>
<td>2</td>
<td>155</td>
<td>111</td>
</tr>
<tr>
<td>Sudan (former)</td>
<td>5.2</td>
<td>9.0</td>
<td>2</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td>Swaziland</td>
<td>5.3</td>
<td>9.0</td>
<td>2</td>
<td>95</td>
<td>77</td>
</tr>
<tr>
<td>Tunisia</td>
<td>4.3</td>
<td>13.3</td>
<td>3</td>
<td>171</td>
<td>91</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>4.8</td>
<td>12.3</td>
<td>2.7</td>
<td>158</td>
<td>97</td>
</tr>
<tr>
<td><strong>Countries with a single growth acceleration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>5.0</td>
<td>8</td>
<td>1</td>
<td>40</td>
<td>107</td>
</tr>
<tr>
<td>Kenya</td>
<td>4.1</td>
<td>10</td>
<td>1</td>
<td>41</td>
<td>73</td>
</tr>
<tr>
<td>Lesotho</td>
<td>5.4</td>
<td>8</td>
<td>1</td>
<td>43</td>
<td>30</td>
</tr>
<tr>
<td>Namibia</td>
<td>5.1</td>
<td>13</td>
<td>1</td>
<td>67</td>
<td>68</td>
</tr>
<tr>
<td>South Africa</td>
<td>2.3</td>
<td>13</td>
<td>1</td>
<td>30</td>
<td>36</td>
</tr>
<tr>
<td>Uganda</td>
<td>4.0</td>
<td>11</td>
<td>1</td>
<td>44</td>
<td>57</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>4.3</td>
<td>10.5</td>
<td>1</td>
<td>44</td>
<td>62</td>
</tr>
</tbody>
</table>

*Source: Data from Penn World Tables 9.0.*
development rests in large part on the Lewis-type reallocation of labor from low-productivity sectors to high-productivity sectors.¹

Labor productivity rather than total factor productivity was examined, because data on capital by sector were not available. Although studying only labor productivity may be a limitation, it highlights the nexus between growth and poverty. If labor moves from lower-productivity to higher-productivity sectors, it should have a positive effect on growth and reduce poverty. If growth results mainly from the most productive sectors and they are capital intensive, the process will be less conducive to poverty reduction.

Labor productivity growth, \( g_p \), is decomposed into three components:

\[
g_p = \sum_i w_i g_{p,i} + \sum_i w_i g_i + \sum_i w_i g_{p,i} g_i,
\]

where \( g_{p,i} \) is the growth rate of labor productivity of sector \( i \); \( g_i \) is the growth rate of the share of sector \( i \) in total employment; and \( w_i \) is the weight of sector \( i \) in total GDP.⁷

The three components measure contributions to aggregate productivity growth. The first measures the contribution of productivity growth of the different sectors to aggregate productivity growth. The second measures the contribution of reallocation of labor from low-productivity to high-productivity sectors. The third, which is usually a residual, measures the contribution of reallocation of labor from low-productivity to high-productivity growth sectors. The last two terms reflect structural change involving employment shifts away from sectors with lower labor productivity growth and levels.

Two sources of data were used to assess the effect of reallocating labor. The first, from Timmer et al. (2015), decomposes GDP in constant prices and labor employment in 10 sectors:

- Agriculture, hunting, forestry, and fishing.
- Mining and quarrying.
- Manufacturing.
- Electricity, gas, and water supply.
- Construction.
- Wholesale and retail trade, hotels, and restaurants.
- Transport, storage, and communication.
- Finance, insurance, real estate, and business services.
- Government services.
- Community, social, and personal services.⁸

These data are available from 1960 to 2011 or 2012 for eight African countries that experienced growth spikes: Botswana, Egypt, Ethiopia, Ghana, Kenya, Mauritius, Morocco, and South Africa.⁹

The second source of data, the African Development Bank’s data portal, decomposes GDP in constant prices and employment in three sectors (agriculture, industry, and services) over 1991–2016. These data are newer, but their quality is uncertain. They were therefore used parsimoniously; they were not used when aggregate labor productivity was not consistent with data from the Penn World Tables 9.0. Algeria, Cabo Verde, and Mali were dropped from the analysis, because data from the World Development Indicators show very low growth of labor productivity during recent growth spikes, which is inconsistent with Penn World Tables 9.0 data.¹⁰

Moreover, decomposition into three sectors is probably too coarse to provide an adequate assessment of the sector reallocation effects. So, data from the World Development Indicators were used when available.

Results show a significant contribution of the sectoral reallocation of labor to aggregate labor productivity growth—as much as two-thirds of total growth in some countries (table 2.3). To a large extent this effect comes from reallocating labor out of agriculture. Differences across countries are large: Where the weight of agriculture in the economy had already declined (Botswana, Mauritius, Namibia, South Africa, North Africa), factor reallocation played only a modest (and declining) role.

In some growth spikes, the positive effect of reallocating labor out of agriculture was dampened by the fact that labor moved to services

In some growth spikes, the positive effect of reallocating labor out of agriculture was dampened by the fact that labor moved to services.
Recent high growth rates in Africa have not been accompanied by high job growth rates associated with a gradual reduction of dualism, played a notable role in initial steps of development in Africa during growth spikes. But in some countries the effect was muted by reallocations to sectors that were less dynamic, not more.

THE GROWTH–JOBS–POVERTY NEXUS

This section analyzes the link between growth, employment, and poverty in Africa and examines changes in the sectoral allocation of employment.

### Table 2.3: Contribution to growth of sectoral reallocation of labor (percent, except where otherwise indicated)

<table>
<thead>
<tr>
<th>Country (number of episodes)</th>
<th>Number of sectors</th>
<th>Contribution of average sectoral productivity gains</th>
<th>Contribution of sectoral reallocation</th>
<th>Contribution of dynamic sectoral reallocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana (1)</td>
<td>10</td>
<td>20.1</td>
<td>58.1</td>
<td>21.7</td>
</tr>
<tr>
<td>Botswana (2)</td>
<td>10</td>
<td>80.4</td>
<td>54.8</td>
<td>−35.3</td>
</tr>
<tr>
<td>Botswana (3)</td>
<td>10</td>
<td>105.8</td>
<td>1.5</td>
<td>−7.3</td>
</tr>
<tr>
<td>Burkina Faso (1)</td>
<td>3</td>
<td>93.4</td>
<td>6.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Egypt (1)</td>
<td>10</td>
<td>70.5</td>
<td>10.9</td>
<td>18.6</td>
</tr>
<tr>
<td>Egypt (2)</td>
<td>10</td>
<td>121.0</td>
<td>−19.3</td>
<td>−1.7</td>
</tr>
<tr>
<td>Egypt (3)</td>
<td>10</td>
<td>125.6</td>
<td>−14.7</td>
<td>−10.9</td>
</tr>
<tr>
<td>Egypt (3)</td>
<td>3</td>
<td>84.6</td>
<td>32.1</td>
<td>−16.6</td>
</tr>
<tr>
<td>Egypt (4)</td>
<td>10</td>
<td>140.0</td>
<td>−8.8</td>
<td>−31.2</td>
</tr>
<tr>
<td>Egypt (4)</td>
<td>3</td>
<td>87.3</td>
<td>22.1</td>
<td>−9.4</td>
</tr>
<tr>
<td>Ethiopia (3)</td>
<td>10</td>
<td>50.0</td>
<td>61.7</td>
<td>−11.7</td>
</tr>
<tr>
<td>Ghana (1)</td>
<td>10</td>
<td>57.1</td>
<td>33.1</td>
<td>9.8</td>
</tr>
<tr>
<td>Ghana (1)</td>
<td>3</td>
<td>62.6</td>
<td>45.8</td>
<td>−8.4</td>
</tr>
<tr>
<td>Kenya (1)</td>
<td>10</td>
<td>81.0</td>
<td>17.1</td>
<td>1.9</td>
</tr>
<tr>
<td>Kenya (1)</td>
<td>3</td>
<td>66.2</td>
<td>28.0</td>
<td>5.8</td>
</tr>
<tr>
<td>Mauritania (2)</td>
<td>3</td>
<td>39.0</td>
<td>58.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Mauritius (1)</td>
<td>10</td>
<td>103.7</td>
<td>28.8</td>
<td>−32.5</td>
</tr>
<tr>
<td>Mauritius (2)</td>
<td>10</td>
<td>68.4</td>
<td>41.2</td>
<td>−9.5</td>
</tr>
<tr>
<td>Mauritius (3)</td>
<td>10</td>
<td>87.5</td>
<td>22.8</td>
<td>−10.3</td>
</tr>
<tr>
<td>Mauritius (3)</td>
<td>3</td>
<td>83.3</td>
<td>18.4</td>
<td>−1.7</td>
</tr>
<tr>
<td>Morocco (1)</td>
<td>10</td>
<td>59.4</td>
<td>43.6</td>
<td>−3.0</td>
</tr>
<tr>
<td>Morocco (2)</td>
<td>10</td>
<td>65.2</td>
<td>33.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Morocco (3)</td>
<td>10</td>
<td>31.5</td>
<td>74.9</td>
<td>−6.4</td>
</tr>
<tr>
<td>Morocco (4)</td>
<td>10</td>
<td>88.1</td>
<td>25.4</td>
<td>−13.5</td>
</tr>
<tr>
<td>Namibia (1)</td>
<td>3</td>
<td>100.1</td>
<td>−0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>South Africa (1)</td>
<td>10</td>
<td>116.3</td>
<td>−12.0</td>
<td>−4.3</td>
</tr>
<tr>
<td>South Africa (1)</td>
<td>3</td>
<td>86.9</td>
<td>13.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Tunisia (3)</td>
<td>3</td>
<td>92.9</td>
<td>7.5</td>
<td>−0.4</td>
</tr>
<tr>
<td>Uganda (1)</td>
<td>3</td>
<td>0.9</td>
<td>45.4</td>
<td>49.0</td>
</tr>
</tbody>
</table>

Source: 10-sector data from Timmer, de Vries, and de Vries (2015); 3-sector data from World Development Indicators.
It links the results to the lack of structural transformation and labor market characteristics in Africa and identifies policies that can promote pro-employment growth.

**Jobless growth?**

An expected corollary of sustained growth is employment creation, which is usually required for poverty reduction and inclusive growth. Recent high growth rates in Africa have not been accompanied by high job growth rates. Between 2000 and 2008 employment grew at an annual average of 2.8 percent, roughly half the rate of economic growth. Only five countries—Algeria, Burundi, Botswana, Cameroon, and Morocco—experienced employment growth of more than 4 percent. Between 2009 and 2014 annual employment growth increased to an average of 3.1 percent despite slower economic growth. But this figure was still 1.4 percentage points below average economic growth.

Slow job growth has primarily affected women and youth (ages 15–24). Africa is estimated to have had 226 million youth in 2015, a figure projected to increase 42 percent, to 321 million by 2030. In 2016 youth unemployment in North Africa was more than three times higher than adult unemployment.12

The lack of job growth has retarded poverty reduction. Although the proportion of poor people in Africa declined from 56 percent in 1990 to 43 percent in 2012, the number of poor people increased.13 Inequality also increased, with the Gini coefficient rising from 0.52 in 1993 to 0.56 in 2008 (the latest figure available).14

The combination of high economic growth and low job creation has given rise to the claim that Africa is experiencing jobless growth. In the face of rapidly growing populations and heightened risks of social unrest or discontent, jobless growth is a serious concern for African policy makers. The urgency of creating enough “good jobs” cannot be overstated.

Given the minimal role of capital deepening in explaining growth episodes, a key policy implication is to rely on a balanced mix of investments and productivity gains. Movements from low-productivity to higher-productivity activities present a significant source of growth potential in Africa. So a first priority for African governments is to encourage a shift toward labor-absorbing growth paths. They should put in place programs and policies aimed at modernizing the agricultural sector, which employs most of the population. A second priority is to invest in human capital, particularly in the entrepreneurial skills of youth, to facilitate the transition to higher-productivity modern sectors.

**Is there a trade-off between employment and GDP growth?**

The demand for labor is derived demand, linked to output. Understanding the relationship between employment growth and output growth is thus critical. The strength of this relationship varies across countries and time periods. In some economies labor markets are very responsive to output growth, and jobs are created rapidly as the economy grows. In other countries labor markets respond weakly, and faster rates of growth are required to achieve a given rate of employment growth. How closely linked were output and employment growth across Africa during the 2000s?

The arc elasticity of employment growth with respect to GDP growth was calculated for each country with data.15 It is the ratio of the employment growth rate over 2000–14 to the GDP growth rate over the same period. An elasticity of more than 1 means that employment grew faster than GDP; an elasticity of less than 1 means that GDP grew faster than employment, an elasticity of 1 means that employment and GDP grew at the same rate.

The average employment elasticity was 0.41 (figure 2.3): that is, for every 1 percentage point of economic growth, employment grew by 0.41 percentage points.

Of 47 countries in the sample, 18 (38 percent) had an employment–to–GDP elasticity of 0.41 or below. Another 20 countries (43 percent) had an elasticity of 0.41–1.00. Four of five African countries thus experienced GDP growth that was faster than employment growth. In this group of countries, Equatorial Guinea (a major oil producer) had the lowest elasticity (0.16); GDP growth was powered almost exclusively by the increase in the price of oil. The remaining countries had elasticities of more than 1, indicating that employment growth outpaced GDP growth over the period.
Ideally, job growth should go hand in hand with productivity gains, but there can be a tension between them.

FIGURE 2.3 Elasticity of employment with respect to GDP in selected African countries, 2000–14

Source: Data from World Bank (2017a) and ILO (2011).
Note: Elasticities are not displayed for Zimbabwe (−5.7) or the Central African Republic (−3.0).
The desirable employment elasticity for developing countries is about 0.7.\textsuperscript{16} It is based on the elasticity in the Republic of Korea during the 1970s, when the country had a level of development and resource endowment comparable to that of some African countries. With output growth of at least 5 percent, this elasticity should be sufficient to achieve employment growth of at least 3.5 percent, in excess of the growth in the labor force in most African countries.

An elasticity of 0.7 would allow for growth in labor productivity, which can reduce poverty. Ideally, job growth should go hand in hand with productivity gains, but there can be a tension between them, as a result of a possible inverse relationship. Getting the balance right is challenging and depends on the policy priorities of each country. In countries with high poverty rates and surplus labor (characteristics of many African countries), a high elasticity of employment may be preferable, because it may have a greater effect on poverty reduction than growth in labor productivity.\textsuperscript{17}

Six African countries (Senegal, Congo, Malawi, Niger, Benin, and Mauritania) have elasticities close to 0.7; another 12 have higher employment elasticities. For the majority of African countries, GDP growth exceeded employment growth (low employment elasticities). Although a low employment elasticity is associated with rising labor productivity, it translates into fewer jobs created for a given rate of output growth.

Indeed, in the last decade, faster-growing countries in Africa actually generated fewer jobs than countries that grew more slowly (figure 2.4). Structural change that promotes rapid movement of labor from low- to high-productivity sectors is necessary to reduce poverty rapidly through growth.

**Evidence of structural change in selected African countries**

To sustainably reduce poverty, economies must create more productive jobs, which are better remunerated.\textsuperscript{18} For this to happen, they need to shift capital and labor away from low-productivity sectors toward higher-productivity sectors.\textsuperscript{19} This process is known as structural transformation.

The extent of structural transformation in Africa over 2000–10 (the high growth period) is shown by plotting the log of relative productivity (sectoral productivity divided by total productivity), calculated as GDP divided by employment for each sector and the whole economy respectively, against the change in employment within these sectors for an African regional aggregate for the

---

**FIGURE 2.4 Employment and GDP growth in selected African countries**

<table>
<thead>
<tr>
<th>Average rate of employment growth (percent)</th>
<th>Average rate of GDP growth (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5</td>
<td>-5</td>
</tr>
<tr>
<td>2.0</td>
<td>0</td>
</tr>
<tr>
<td>1.5</td>
<td>5</td>
</tr>
<tr>
<td>1.0</td>
<td>10</td>
</tr>
<tr>
<td>0.5</td>
<td>15</td>
</tr>
<tr>
<td>0.0</td>
<td>20</td>
</tr>
<tr>
<td>-0.5</td>
<td>-10</td>
</tr>
<tr>
<td>-1.0</td>
<td>-15</td>
</tr>
<tr>
<td>-1.5</td>
<td>-20</td>
</tr>
</tbody>
</table>

Source: AfDB computations.
Employment moved away from relatively low-productivity industries toward high-productivity industries.

Structural transformation has largely not occurred, for four main reasons:

- First, the agricultural sector remains the dominant source of jobs in Africa, accounting for about 51 percent of employment in these countries, most of it in subsistence agriculture.
- Second, the shift to manufacturing is toward a comparatively small sector, with the third-lowest relative productivity level after agriculture and services. Indeed, productivity in manufacturing is only slightly higher than that of the economy.
- Third, labor resources that left agriculture moved toward wholesale and retail trade, much of it characterized by low-productivity informal activities. The informal sector remains a key source of employment in most African countries, accounting for 70 percent of jobs in Sub-Saharan African and 62 percent in North Africa. Ninety-three percent of all job growth in Africa in the 1990s was in the informal sector.
- Fourth, the public sector has generally been the main source of higher-paying formal sector.

**FIGURE 2.5 Sectoral productivity and employment growth in Africa, 2000–10**

Average rate of employment growth (percent)

Source: Data from the Groningen Growth and Development Centre 10–sector database (Timmer, de Vries, and de Vries 2015).

Note: Circle size represents employment share in 2000. The coefficient of the fitted line is 0.17 (t-statistic 0.16; p-value: 0.88). Countries include Botswana, Ethiopia, Ghana, Kenya, Malawi, Mauritius, Nigeria, Senegal, South Africa, Tanzania, and Zambia.
jobs in many African countries. Fiscal constraints and demographic change have combined to limit the future scope of the public sector as a driver of formal sector employment growth.

**Structural inflexibilities in African labor markets**

The characteristics of labor markets in Africa vary widely, a result of differences in development levels and labor regulations. Figure 2.6 illustrates differences in three aggregate labor market indicators: the labor force participation rate, the employment-to-population ratio, and the unemployment rate.

The labor force participation rate—the proportion of the working-age population that is active in the labor market (either employed or unemployed)—is lowest in North Africa and highest in East Africa. For example, just 44 percent of the working-age population in Algeria is active in the labor force, compared with 86 percent in Madagascar.

Employment-to-population ratios range from 39 percent in Algeria, South Africa, and Swaziland to more than 80 percent in Burkina Faso, Burundi, Madagascar, Rwanda, and Uganda. Unemployment explains the differences between these ratios and labor force participation. In most countries, unemployment rates are low: 33 of 52 countries had unemployment rates below 10 percent, with the region’s median unemployment rate at 7.3 percent. Unemployment rates are high in Southern Africa, however, with Lesotho Mozambique, Namibia, South Africa, and Swaziland all having rates of 24–28 percent.

Several characteristics are common to a large majority of countries. Four of them—informality, the dominance of agriculture, low-productivity and low-quality employment, and underemployment—are discussed here.

**Informality**

Informality is a defining feature of African labor markets. The informal economy accounts for an estimated 50–80 percent of GDP, 60–80 percent

---

**FIGURE 2.6** Selected labor market indicators for African countries, 2016

<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Note: Data are the modeled International Labor Organization estimates for each country. The employment-to-population ratio and labor force participation rate are based on the population 15 and older.</td>
</tr>
</tbody>
</table>
Policy makers should recognize the diversity and importance of the informal sector as a profitable activity. Definitions of what constitutes the informal sector vary. For firms, the criteria include registration status, size, tax status, compliance with social security legislation, the availability of accounting statements, and whether the business has a permanent physical address. Informality can thus be seen as a multidimensional continuum that includes a wide variety of types of firms with different motivations, productivity levels, and sizes.

However it is defined, the informal sector accounts for the majority of employment in most African countries. Policy makers should therefore recognize the diversity and importance of the sector as a profitable activity that may contribute to economic development and growth.

Figure 2.7 presents estimates of the employment structure in 15 African countries. The dominance of the informal sector—which includes both private informal wage employment and nonwage employment—is evident. Except in South Africa (18 percent), Botswana (35 percent), and Egypt (47 percent), nonwage workers account for two-thirds to nine-tenths of employment. Women and youth are disproportionately engaged in the informal sector.

Formal sector employment is uncommon in most countries; only in South Africa does it account for the majority of jobs. In Botswana and Egypt, the sector accounts for 40–50 percent of employment, and in most others, less than 20 percent.

Informality is not confined to the region’s rapidly growing urban centers. Apart from agricultural self-employment and related unpaid family work, a substantial proportion of employment in rural areas is in informal nonagricultural household enterprises.

**Agriculture’s dominance**

The agricultural sector is the primary employer in many African countries, particularly in rural areas, where the majority of people live. The average share of agriculture in employment was 51 percent between 2011 and 2016, and the share of agricultural valued added remained virtually unchanged at about 15 percent. In 16 countries, the sector accounted for more than 30 percent of output, and in Liberia and Sierra Leone for more than 48 percent.

The sector’s productivity remains low. During the last decades, for example, cereal yields...
increased by 164 percent in Brazil, 81 percent in Uruguay, 69 percent in Chile, and 43 percent in Malaysia—but by less than 40 percent in Africa.27 The poor performance is partly a result of low investment, low-quality inputs, and low adoption of improved production technologies. Productivity could be improved by addressing these constraints; linking agriculture with other sectors; and building agricultural value chains, which include input producers, farmers, traders, food processors, and retailers.28 What’s needed is to look across the value chain to remove bottlenecks and address market failures.

**Low-productivity, low-quality employment**

Wages in agriculture are lower than wages in industry and services. And because the manufacturing sector is small, few workers in Africa can benefit from higher wages in industry. The share of manufacturing employment in Vietnam and Cambodia is five times that of low-income African countries.29

Wages in Ghana in 2013 were highest in services and lowest in agriculture. Wages in the energy sector were 3.7 times higher, and wages in the public sector were 4.9 times higher, than wages in agriculture. Trends are similar in Kenya, where workers in the finance and energy sectors earn four to six times more than workers in agriculture.30

Much informal employment is precarious and unprotected. Labor regulations often fail to improve the lot of the average worker.31 And although most African countries have ratified the international labor standard conventions, their impacts are muted because they apply only to the limited formal sector, are weakly enforced, and in some cases are nonbinding.32

Table 2.4 presents data on employment conditions in Egypt, Mali, South Africa, and Zambia. It reveals the precarious and unprotected employment typical of many countries in Africa. For example, only about half of Malian and Zambian workers and just one-quarter of Egyptian workers have written contracts. Even fewer workers report social security coverage, with the proportion ranging from 30 to 40 percent in Egypt, South Africa, and Zambia; in Mali, social security covers fewer than 1 worker in 50.

**Underemployment**

Unemployment is low in most African countries, but a more pressing problem is underemployment. Analysis of underemployment is complicated by the lack of data on hours worked and by its complexities. A worker may be classified as

---

**TABLE 2.4 Conditions of employment in Egypt, Mali, South Africa, and Zambia**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of contract</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Official/written</td>
<td>26.6</td>
<td>54.3</td>
<td>76.6</td>
<td>46.3</td>
</tr>
<tr>
<td>Verbal</td>
<td>Not available</td>
<td>26.6</td>
<td>23.5</td>
<td>50.2</td>
</tr>
<tr>
<td>No contract</td>
<td>34.7</td>
<td>19.1</td>
<td>Not available</td>
<td>1.8</td>
</tr>
<tr>
<td>Unspecified</td>
<td>38.8</td>
<td>Not available</td>
<td>Not available</td>
<td>1.9</td>
</tr>
<tr>
<td><strong>Social security coverage</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>32.3</td>
<td>1.9</td>
<td>38.4</td>
<td>39.1</td>
</tr>
<tr>
<td>No</td>
<td>67.0</td>
<td>97.1</td>
<td>58.7</td>
<td>56.7</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0.8</td>
<td>1.1</td>
<td>2.9</td>
<td>4.2</td>
</tr>
</tbody>
</table>


*Note:* For South Africa, social security coverage refers to individuals who indicate that their employer contributes to a pension fund on their behalf.
Africa’s labor force will increase from 620 million in 2013 to nearly 2 billion in 2063.

Being in time-related underemployment, in “invisible” underemployment, or both. Time-related underemployment describes workers who work fewer hours than they would like. Invisible underemployment includes workers who earn less than the minimum wage, because in many instances it is disguised as long hours at very low pay.

Time-related underemployment is relatively low in Africa, averaging 10–15 percent of employment. It is highest in agriculture and in the informal sector. It is more common among women than men and among urban dwellers than rural dwellers, and it is not correlated with age.

Invisible underemployment is much higher. In 11 cities in 10 countries (Benin, Burkina Faso, Cameroon, the Democratic Republic of Congo, Côte d’Ivoire, Madagascar, Mali, Niger, Senegal, and Togo), it is substantially higher than time-related underemployment.

**Demographic trends and technological changes: Some challenges**

Africa will become the youngest and most populous continent in the next few decades. Various sources project that its labor force will increase from 620 million in 2013 to nearly 2 billion in 2063, a megatrend that has spurred hope of accelerated growth at relatively constant wage rates (table 2.5).

A "demographic dividend" might provide a great opportunity for Africa—and the rest of the world, which is expected to experience significant labor shortages. But technological advances could reduce its value. The use of artificial intelligence and robotics in manufacturing, agriculture, and services could hurt job creation. In the face of this threat, African countries need to invest heavily in training and upgrading of skills (box 2.1).

**Effect of growth accelerations on poverty and inequality**

The moderately sustained per capita GDP growth in the last two decades has not generated comparable reductions in poverty. One of the main reasons is that the rapid growth in many countries originated in modern capital-intensive sectors rather than in traditional sectors (agriculture and the informal sector).

Rapidly growing countries performed poorly in generating employment. In addition, income inequality did not narrow. Indeed, the Gini coefficient in Africa increased significantly in the late 1990s and early 2000, leveling off later.

The evidence for developing countries suggests that it is the pace of structural change that

<table>
<thead>
<tr>
<th>Region</th>
<th>Total population</th>
<th>Working-age population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Millions</td>
<td>Average annual percentage change</td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>2063</td>
</tr>
<tr>
<td>Asia</td>
<td>4,331</td>
<td>5,244</td>
</tr>
<tr>
<td>Europe</td>
<td>740</td>
<td>693</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>619</td>
<td>787</td>
</tr>
<tr>
<td>Northern America</td>
<td>351</td>
<td>456</td>
</tr>
<tr>
<td>Oceania</td>
<td>38</td>
<td>62</td>
</tr>
<tr>
<td>Africa</td>
<td>1,135</td>
<td>3,095</td>
</tr>
<tr>
<td>World</td>
<td>7,213</td>
<td>10,338</td>
</tr>
<tr>
<td>Sub-Saharan share of world population (%)</td>
<td>15.7</td>
<td>29.9</td>
</tr>
</tbody>
</table>

Source: AfDB calculations based on the UN Medium Variant Projections.
The main source of growth accelerations is rapid structural change through the reallocation of labor.

has lifted millions of people out of poverty. Across the developing world, a 1 percent increase in the growth of the labor force in manufacturing was related to a 0.8 percent decline in headcount poverty.38 Almost 84 percent of Africa’s poverty is a result of employment in agriculture and services.39 The dual nature of most African economies—in which the majority of the workforce works in the subsistence sector while a small fraction of the workforce is employed in rapidly growing and highly productive sectors—is the single most important reason for poverty to persist and inequality to remain high.

The correlation between poverty and growth accelerations is negative (table 2.6). Countries that completed at least one episode of growth acceleration had poverty rates that were 0.5–0.7 percentage points lower than those of countries with no growth acceleration episodes; countries that completed at least three growth episodes had poverty rates that were 1.3 percentage points lower.

The main source of growth accelerations is rapid structural change through the reallocation of labor. Structural change, rather than growth in per capita income, is a potent source of poverty reduction for African countries, as it has been for most developing countries. The largest reductions in the headcount ratio were for countries that experienced episodes of growth accelerations (table 2.6). For instance, countries that completed...
one growth acceleration managed to reduce 0.5 percentage points faster than those with no acceleration episodes. Countries that completed two, 0.7 points faster, and countries that completed three, 1.2 points faster.

Countries that completed two growth accelerations also reduced inequality faster by about 0.1 percentage point every year; countries that completed three accelerations reduced it by about 0.2 percentage points (table 2.7).

The conventional wisdom is that growth reduces poverty. An alternative view is that poverty reduction may instead have caused growth. Berthélemy (2017) provides support for this hypothesis in a sample of African countries that experienced growth spikes. Although the results should be interpreted with caution, they shed new light on the debates on poverty reduction and growth in Africa (box 2.2).

Table 2.6: Effect of growth accelerations on poverty

<table>
<thead>
<tr>
<th>Log of poverty headcount ratio</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log of real per capita GDP</td>
<td>–0.254***</td>
<td>–0.254***</td>
<td>–0.186***</td>
</tr>
<tr>
<td></td>
<td>(0.0542)</td>
<td>(0.0518)</td>
<td>(0.0505)</td>
</tr>
<tr>
<td>Log of Gini coefficient</td>
<td>2.611***</td>
<td>1.963***</td>
<td>1.680***</td>
</tr>
<tr>
<td></td>
<td>(0.329)</td>
<td>(0.336)</td>
<td>(0.287)</td>
</tr>
<tr>
<td>Dummy (at least one acceleration)</td>
<td>–0.518***</td>
<td>–0.679***</td>
<td>–1.257***</td>
</tr>
<tr>
<td></td>
<td>(0.121)</td>
<td>(0.166)</td>
<td>(0.181)</td>
</tr>
<tr>
<td>Dummy (at least two accelerations)</td>
<td></td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dummy (at least three accelerations)</td>
<td></td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>–4.786***</td>
<td>–2.464*</td>
<td>–1.843*</td>
</tr>
<tr>
<td></td>
<td>(1.258)</td>
<td>(1.260)</td>
<td>(1.068)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.282</td>
<td>0.307</td>
<td>0.386</td>
</tr>
<tr>
<td>N</td>
<td>254</td>
<td>254</td>
<td>254</td>
</tr>
</tbody>
</table>

Source: Data from PovcalNet and Penn World Tables 9.0.
Note: Pooled ordinary least squares. Standard errors in parentheses.
* p < 0.10, ** p < 0.05, *** p < 0.01.

Look at productivity not just investment
A first striking characteristic of growth spikes is that capital deepening played a smaller role than total factor productivity gains. In the 1960s and 1970s African governments attempted to promote growth by investing in infrastructure and adopting policies that promoted physical capital investment that ultimately turned out to be unsustainable. Expansionary policies were often financed by short-term trade booms or excessive foreign borrowing. These policies often relied on natural resource depletion. Sometimes they involved investment programs that were too large given the absorptive capacity, creating white elephants (box 2.3).
Sustainable growth accelerations must involve productivity improvements.

These experiences suggest that sustainable growth accelerations must be intensive rather than merely extensive and must involve productivity improvements. African policy makers have largely heeded them. Successful economies in North Africa and Southern Africa have relied on a balanced mix of investment and productivity gains.

Have public policy facilitate private initiatives

Factor productivity cannot be increased by decree. Progress must to a large extent come from private initiatives. The role of public policy is to facilitate and accompany these initiatives. Movements of workers from low-productivity to

<table>
<thead>
<tr>
<th>TABLE 2.7 Effect of growth accelerations on inequality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log of Gini coefficient</td>
</tr>
<tr>
<td>Log of real per capita GDP</td>
</tr>
<tr>
<td>Dummy (at least one growth acceleration)</td>
</tr>
<tr>
<td>Dummy (at least two growth acceleration)</td>
</tr>
<tr>
<td>Dummy (at least three growth acceleration)</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>R-squared</td>
</tr>
<tr>
<td>N</td>
</tr>
</tbody>
</table>

Source: Data from PovcalNet and Penn World Tables 9.0.
Note: Pooled ordinary least squares. Standard errors in parentheses.
*p < 0.10, **p < 0.05, ***p < 0.01.

BOX 2.2 Does poverty hamper growth—or boost it?

Reinforcing vicious circles can keep households or countries poor and prevent them from contributing to national growth. Poverty can slow growth in many ways, including the following:

- Limited access to financial markets or other assets for private investment hampers the development of productive activities.
- Poor health reduces productivity.
- Low-quality education limits people’s ability to generate income.
- Lack of infrastructure makes countries unattractive to foreign investment.

In contrast, Berthélemy (2017) finds that poverty reduction led to growth in most of Africa’s growth spikes—and that it came from reforms that created more job opportunities for the poor and from successful pro-poor transfer policies.

This new notion may be relevant to policy makers advocating for antipoverty and social programs to promote growth on a more sustainable basis. As Perry and others (2006) note, “Smart investment in the poor can lead to virtuous circles and that the issue of pro-growth poverty reduction should perhaps be as important a policy concern as traditional concerns with pro-poor-growth.”

Source: Perry and others (2006), Thorbecke (2013), and Berthélemy (2017).
Important in China’s success is that it did not follow the dominant mode of economic thinking, “shock therapy,” which simultaneously inflicts a wholesale set of politically difficult reforms. Instead, it adopted a pragmatic dual-track approach.

On one track, it continuously provided transitory protection and subsidies to large, capital-intensive state-owned enterprises that violated China’s comparative advantage but were essential for national defense and people’s basic needs. The state actively facilitated those industries to create comparative advantage by overcoming bottlenecks in hard and soft infrastructure. On the second track it liberalized the entry of private and foreign firms to China’s industries aligned with its comparative advantage. The shifts in comparative advantage allowed the government to deepen reforms, remove protections and subsidies, and allow the market to be decisive in allocating resources.

China’s economic development and transition provide three lessons for other developing countries.

First, be pragmatic and realistic. It is essential to have objective and comprehensive assessments of the country’s basic realities and conditions—including its development stage and its labor, capital, and natural resource endowments—and of the key problems and their origins. Also essential is having a systematic assessment of countries at different development stages, and of the relations, differences, and complementarities with other countries. Especially important is not blindly copying other countries, especially the theories, policies, and experiences of developed countries, in very different conditions.

Second, formulate economic development and transition strategies suitable for one’s own country. Such strategies have many dimensions, including industrial policy. Technological innovation and industrial upgrading drive a developing country’s development. But the upgraded industries need to be consistent with the country’s factor endowments to ensure that the factor costs of firms are the lowest in the world. That is not easy because the transaction costs for developing country firms are generally high due to inadequate infrastructure, institutions, and business environment. It is necessary to reduce firms’ transaction costs to increase their market competitiveness.

It is the government’s responsibility to improve infrastructure, the business environment and legal institutions. But its resources are limited and, therefore, they should be used strategically to improve infrastructure and other binding constraints in suitable locations so as to reduce transaction costs for the targeted industries to turn from comparative advantage to competitive advantages quickly.

In this way, small wins can be accumulated to become large wins. With vibrant economic development, the improvement of infrastructure, the business environment and legal institutions can be extended step-by-step nationwide.

Third, learn from the mistakes of structuralism’s excessive intervention and neoliberalism’s laissez-faire and instead have the market and the state play their respective roles in the economic transition.

Source: Adapted from Lin 2017.
higher-productivity activities represents a significant source of growth potential in Africa given the dual structure of its economies. Market reforms and investment in infrastructure that increases competitiveness can help channel the development of modern sectors and the reallocation of labor into them. The creation of good employment opportunities is one of the critical challenges facing African governments, particularly given the continent’s rapidly growing population.

**Shift to labor-absorbing growth paths**

Robust and sustained economic growth is not a sufficient condition for employment expansion but it is necessary. Indeed, the pattern of economic growth determines its employment impact. A key policy priority is to encourage a shift toward more labor-absorbing growth, characterized by strong backward and forward linkages between firms. Recent trends are symptomatic of the suboptimal pattern of growth experienced across the continent.40

Reversing the fortunes of the manufacturing sector, particularly light manufacturing, is typically considered key to job creation in Africa. Doing so requires developing exports (given Africa’s small domestic markets), but the land-lockedness of many countries makes it challenging.41 Agriculture presents “the most promising avenue for export-led growth in many African countries.”42 Both agriculture and manufacturing are labor intensive, amenable to quality improvements through technology transfer, and face “lucrative but quality-sensitive” international markets. Both are hamstrung by inhospitable economic and business climates and infrastructure gaps.43 In the highly heterogeneous service sector, the imperative is to develop modern services while improving the productivity of informal activities.

**RECOMMENDED POLICY MEASURES**

Various interventions can increase the ability of African economies to create employment. They should work in tandem to support the growth of more labor-intensive sectors and raise productivity and incomes.

**Improve the regulatory environment**

Regulatory frameworks have important implications for firms. The objective should be to eliminate unnecessary, complex, and counterproductive regulations. Many countries have made progress on this front in recent years: 36 of 46 countries in Sub-Saharan Africa improved their regulatory environment in 2010–11.44 In 2016 Rwanda and Gambia ranked among the world’s top 10 performers in the (lack of) burden of government regulation, and only one African country (Zimbabwe) was among the bottom 20 countries.45

A supportive regulatory environment is also needed for the informal economy. Government policy should support small firms and encourage a progression toward higher productivity; for large firms the aim should be to achieve “a more systematically enforced and enforceable regulatory regime.”46 The effects of a simplified regulatory framework can be dramatic. After Rwanda introduced procedural reforms, the number of new firms created more than quadrupled, from 700 in 2010 to 3,000 in 2016.47

**Consider wage subsidies**

Wage subsidies can also be considered for industries that are clearly competitive but facing temporary shocks.48 They allow employers to keep employees on their payroll rather than lay them off for economic reasons—and to hire young workers or women by paying part of the salary for a given period, allowing such workers to acquire or develop skills that eventually provide long-term employment. But because some employers may view subsidies simply as a temporary source of cheap labor, the risk of deadweight losses should also be considered. Governments should therefore be prudent in determining the subsidy level and duration because extensive reliance on public sector employment as a source of jobs and income often produces deep social and cultural consequences. Some regions can be caught in an equilibrium of dependency in which public sector jobs become the only source of income, and opportunities for private sector development do not materialize. This creates a vicious, self-fulfilling circle whereby entrepreneurship is discouraged while dependency on government for livelihood is enhanced. The result can be powerful
political constituencies of public sector employees and union members who oppose labor market reforms.

Training programs to help new and laid off workers gain or regain skills could contribute to increased productivity if such programs are targeted to the neediest groups (the youth, the disadvantaged, or women). Youth-oriented programs designed in close collaboration with private firms to assess demand for skills and to provide tailored training programs can yield good results. To ensure the maximum chance for success, they should be tailored to the business needs of the potentially competitive industries in each country.

**Target economically viable activities**

Education and labor market reforms and resources should target activities, programs, and projects that are economically viable. Governments should work with the private sector and the academic community to decide which type of education should be given priority and how to intervene for success. To guide priorities in the education sector, some industries or lines of business should be identified—industries in which the country has clear or latent comparative advantage. In each selected priority industry (agro-business, light manufacturing, tourism), the design and implementation of skill formation strategies and workforce development plans should provide a framework for firms, the government, and communities to work with each other.

Those skills formation strategies and workforce development plans should include a holistic understanding of workforce issues and recognize that effective skill development can only occur when planned as part of the broader workforce and the future of the industry or community. They should identify issues common to an industry or community that are best addressed by their combined efforts—or that cannot be addressed by an individual organization. All relevant stakeholders could then work together to analyze and address current and future workforce issues that may affect their viability.

**Invest in industries with high payoffs**

Government should select and target sectors with competitive potential to focus their limited resources on providing sector-specific infrastructure that quickly yields the highest payoffs. Labor-intensive industries include agribusiness and creative industries such as the film industry, which employs 1 million people in Nigeria alone. Light manufacturing can absorb many low-skilled workers who can be trained quickly in garments, textiles, leather, and tourism. And some modern services and new digital industries are promising for countries with a large pool of skilled labor. Industry selection is critical to create jobs because African countries do not have comparative advantage in all sectors and industries. And they cannot afford generic and blind policy frameworks with long lists of reforms “to improve the business environment,” as is often recommended.

Developing countries can reap substantial economic benefits from their status as latecomers and exploit their low factor costs to promote labor-intensive industries in which they have comparative advantage. Success obviously requires strong collaborative work between the state and the private sector in identifying new sectors or lines of business and setting priorities for infrastructure investment.

**Attract foreign investors**

A proactive strategy can attract foreign direct investment (FDI) into competitive industries. FDI provides long-term capital and induces industrial upgrading and the adoption of new technology and innovation in host countries, stimulating economic growth. It can also stimulate fixed investment and exports and thus boost economic growth through increased aggregate demand. In the medium and long term it contributes to transforming the industrial structure of the host economy and the commodity composition of its exports, typically toward higher value-added goods and services. The presence of foreign firms, with their superior technology and management skills generally exposes domestic firms to more intense competition, improving the performance and increasing their research and development spending. That process tends to enhance the marginal productivity of the capital stock in the host economy, promoting growth. FDI can also encourage the development of “agglomeration economies” by establishing clusters and
networks of industries that are both collaborative and competitive. Possibly FDI’s most important benefit is raising employment in host countries by creating new jobs either directly and using local inputs—and by generating the demand for additional services linked to the primary activities that attracted external capital, indirectly creating more employment.

Enter global value chains
No longer about manufacturing a product in one country and selling it elsewhere, trade is now about cooperating across boundaries and time zones to minimize production costs and maximize market coverage. Global value chains are therefore the dominant framework for trade. Estimates suggest that reducing supply chain barriers could increase global GDP up to six times more than removing all import tariffs. Simulations indicate that improvements on just two key bottlenecks to supply chains—border administration and transport and communications infrastructure—only halfway to that of Singapore would yield an increase of $2.7 trillion in global GDP (4.7 percent) and $1.6 trillion in global exports (14.5 percent). These staggering numbers compare with much smaller gains from complete worldwide tariff elimination, which would only lead to $400 billion in global GDP (0.7 percent) and $1.1 trillion in global exports (10.1 percent).

Global trade and value chains operating around the planet open new opportunities to poor countries, just as the “graduation” of large manufacturing centers like China relinquishes low-skilled employment for poorer economies.\(^49\) Build successful special economic zones and industrial parks
Clusters, industrial parks, and export processing zones and active FDI promotions are pragmatic instruments for circumventing deficits in infrastructure and human capital, as well overcoming the pervasive governance problems in low-income countries. They are also useful bridges to connect poor countries to global value chains. And they are essential pillars of the strategy for exploiting comparative advantage. Widely used by successful East Asian economies, they have recently served Bangladesh, Cambodia, Mauritius, and Vietnam—and Ethiopia and Rwanda. Such a strategy is superior to the conventional development strategy to support domestic firms in order to first enter domestic markets and then to gradually enter international markets.

Even in generally poor business environments, the zones and parks can also lower the cost of doing business by building strategically located clusters and attract foreign direct investment. That also brings in technology, managerial best practices, new knowledge, state-of-the-art learning, and access to large global markets. Such a pragmatic economic development strategy facilitates the dynamic development of competitive private firms in well-selected regions and industries, provides employment for a labor force with low skills, and rapidly increases fiscal revenues. It would generate steady growth in government revenues and foreign exchange and allows for the improvement of infrastructure in other parts of the country. Ultimately, it can also create the conditions for prosperity and social stability.

Invest in infrastructure
Of the 25 countries with the lowest infrastructure scores in the World Economic Forum’s Global Competitiveness Index for 2017–18, 19 are African.\(^50\) A fifth of African firms surveyed by McKinsey cited lack of electricity as one of the top three obstacles to doing business.\(^51\)

Governments are taking infrastructure investment more seriously, investing an estimated $324 billion in 286 infrastructure projects in 2016.\(^52\) Infrastructure enables export-oriented firms to access international markets quickly, cheaply, and efficiently. It underpins the competitiveness of manufacturing exports and the ability of agricultural exporters to comply with sanitary and phytosanitary requirements in international markets. Insufficient investment in infrastructure thus makes it difficult for African countries to fully capitalize on growth and job creation opportunities.

Some countries have improved their infrastructure. Mali’s targeted roll-out of infrastructure to facilitate mango exports was associated with a sixfold increase in exports to the European Union between 2003 and 2008.\(^53\) International trade is associated with positive employment effects. A study of 47 African
A robust and thriving agricultural sector can stimulate broader economic development.

Modernize the agricultural sector

Agriculture has huge potential to provide high-productivity jobs, create wealth, and propel economic growth in Africa, especially if countries can expand agricultural exports. A robust and thriving agricultural sector can also stimulate broader economic development. Governments should thus aim to stimulate the creation of backward and forward linkages to other sectors, including manufacturing, logistics, and retail, strengthening local operators and stimulating demand. The strategic use of local content policies can encourage the development of such linkages.

Three key interventions could unleash the potential of the agricultural sector:

• Ensuring “acceptably egalitarian” access to land.
• Facilitating the use of modern inputs, seeds, and technologies, by improving access to credit and other means.
• Strengthening the ability to develop and adapt agricultural technologies.

For employment in the sector to increase, countries need to improve access to international agricultural markets, balance socioeconomic demands with environmental considerations, and adapt to and mitigate the effects of climate change.

Build human capital

Low demand for labor, rather than a lack of skills, is the primary constraint on employment expansion in the region; in enterprise surveys, few firms cite lack of education as a top constraint. Only 12 percent of firms cite insufficient skills or education of employees as one of their top three obstacles to growth, placing it 11th of 15 issues reported. But investing in human capital is still important. African governments need to actively promote access to postsecondary and particularly tertiary education. Skill shortages are not confined to highly specialized occupations.

Skills also constrain the development of the informal sector. And the lack of access to credit, technology, physical space, and water and electricity all need to be addressed for the informal sector to increase employment and raise incomes.

Invest in data collection and make data more accessible

Africa’s statistical capacity is below the average for low-income countries, but countries cannot formulate and adapt good policies without good labor market statistics. Insufficient investment in regular labor market surveys means that policy is often based on outdated or nonrepresentative data. Providing timely access to better public data would allow African countries to benefit from analysis by academics and researchers.

In sum: About two-thirds of African countries experienced at least one growth acceleration since the 1950s, raising hope that the determinants of long-term growth have changed for the better. Many African countries also experienced failed take-offs—accelerations followed by deep crises—particularly in the 1960s and 1970s.

The continent’s success stories (growth spikes not followed by crises) can serve as a source of inspiration for African policymakers and suggest ways to avoid failed take-offs. Successful take-offs require increases in productivity as much as growth in investment. Labor force reallocations from the traditional to the modern sector are a key component of African growth accelerations. They require not only the creation of modern jobs but also policies that empower the poor.

A first priority for African governments is to encourage a shift toward labor-absorbing growth paths. They should put in place programs and policies aimed at modernizing the agricultural sector, which employs most of the population. A second priority is to invest in human capital, particularly in the entrepreneurial skills of youth, to facilitate the transition to higher-productivity modern sectors.
NOTES

1. Pritchett 2000. Between 1964 and 1974, for example, real GDP per capita in Liberia grew consistently at 4.2 percent a year; between 1989 and 1996, it fell 25 percent a year, as a result of civil war. In Zambia real per capita GDP fell by an average rate of 4.7 percent a year between 1969 and 1980. After a few years of growth, it experienced an average decline of 4.4 percent a year between 1985 and 1999. Since 2000 it has been enjoying a growth spell.


3. Following Jong-A-Pin and De Haan (2011), the start dates of acceleration episodes used here are the earliest possible dates. The end date of an acceleration episode is the first date when the growth rate falls below 1 percent. In some instances, a separate acceleration starts before this point is reached, in which case the end date of the previous acceleration is the start date of the next one.


5. The acceleration criteria determine the number of accelerations. If a threshold a little lower than 3.5 percent had been chosen, South Africa would have registered several spikes of growth, rather than the single spike in table 2.2.


9. In Egypt and Morocco the decomposition does not include community, social, and personal services, for which employment data were unavailable.

10. Because of data inconsistencies, World Development Indicators were used only after 2005 for Mauritius and Namibia, after 2008 for Uganda, and up to 2005 for Burkina Faso.


12. ILO 2011.


15. Despite some shortcomings, the employment elasticity of growth is a simple tool for analyzing the sensitivity of employment to output growth. Islam and Nazara 2000.


32. UNECA 2005.

33. DIAL 2007; Golub and Hayat 2014.

34. DIAL 2007; Roubaud and Torelli 2013; and Golub and Hayat 2014.

35. Roubaud and Torelli 2013.


40. Bhorat and others 2017a.

41. Bhorat and others 2017a.

42. Golub and Hayat 2014.

43. Golub and Hayat 2014.


45. WEF 2016.


48. See Lin and Monga (2017) for the details.

49. Lin 2011.

50. WEF 2016.


56. Bhorat and others 2017a.

57. Golub and Hayat 2014.


59. Bhorat and others 2017b.

60. Beegle and others 2016.
REFERENCES


